

Weather Event Simulator Case Study

Originating Office	:	WFO Huntsville, AL
Date of Case	:	7 April 2006
Contact	:	Chris.Darden@noaa.gov
Weather Event	:	Numerous Tornadoes, Significant Wind Damage
Learning Objectives	:	<p>Assess the trainee's ability to diagnose features and near-storm environmental trends that may contribute to severe weather mode and initiation.</p> <p>Test the ability of the warning and decision maker to handle multiple, rapidly changing severe weather threats.</p> <p>Introduce to the trainee to the concept of total lightning and the utility of total lightning data in the warning decision making process.</p>
Available Data	:	<p>All radar data for KHTX (Hytow, AL) and KGWX (Columbus, MS).</p> <p>Lowest elevation angle data from surrounding WFOs.</p> <p>The majority of AWIPS model guidance fields.</p> <p>CONUS and SE US scale satellite imagery.</p> <p>All AWIPS point data.</p> <p>LAPS and MSAS graphics</p> <p>LMA Data for April 7th and 8th, covering the entire event (available on accompanying disk)</p>
Time Period of Data	:	pre-storm/near-storm environment: 2100 to 2300 UTC; main event: 2200 to 0400 UTC
Type of Simulation	:	Interval Based and/or Real-Time combination
Completion Time	:	Two to four hours (time permitting).
Additional Materials	:	Microsoft Word copy of the Event Summary and Presentation, storm chaser/spotter photos, damage photos, SPC Outlooks, and WFO products.

An additional cd with the output from the North Alabama Lightning Mapping Array (LMA) along with a total lightning tutorial is included.

- Installation :
- Use the CaseInstaller.tcl script to install the case specifying one (1) DVD, the appropriate directory (e.g., /data/awips) on the appropriate hard drive (e.g., /dev/sdb1). The case directories will be called 2006Apr07 and 2006Apr08. You will have to load the LMA data separately which takes only a few minutes. Instructions are included in the total lightning tutorial.
- Special Instructions :
- The HUN localization is on the accompanying disk.